

A portrait of Matthew Fontaine Maury, a man with dark hair, wearing a dark blue naval officer's uniform with gold buttons and a white shirt with a dark bow tie. He is standing with his right hand on his hip. The background is a light, hazy landscape with a ship visible in the distance.

# Matthew Fontaine Maury

NIMA  
**2003 Pathfinder of the Seas**



Yours truly  
M. J. Maury  
Lt. U. S. N.



# Tributes to M. F. Maury Pathfinder of the Seas

by

Howard J. Cohen

From its inception, the United States has relied upon brave individuals willing to risk life and fortune to explore uncharted territory. Explorers such as Lewis and Clark led expeditions through the Louisiana Purchase, starting what became the great western migration across the North American continent. Their reports, maps and artwork graphically and accurately depicted the little known territory through which they traveled. But as the American westward expansion grew, an equally vital exploration took place on the oceans of the world, led by the pioneer scientist, educator and sailor Matthew Fontaine Maury, our nation's first Superintendent, U.S. Naval Observatory and Hydrographical Office.

The National Imagery and Mapping Agency (NIMA) proudly traces its lineage to these early explorers. Indeed, the Lewis and Clark Expedition is considered by many to be the first nationally-sponsored geospatial intelligence mission,<sup>1</sup> chartered to provide information regarding unknown territory through the use of maps, charts and drawings. Similarly, Matthew Maury applied his expertise to chart the maritime territory both along the coastlines and upon the open sea.

<sup>1</sup> NIMA's Geospatial Intelligence mission is defined as the exploitation of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth.



## Matthew Fontaine Maury Oceanographic Library

*With over 160,000 volumes, the library is located at the Naval Oceanographic Office, Stennis Space Center, MS, & contains the world's foremost military collection of physical oceanographic materials. From modern CD-ROMs to handwritten 18th century ships' logs, the library is famous for the technical comprehensiveness of its holdings. The Maury Library – so named and occupied in March, 1986 – serves as a resource for scientists in government, academia, and private industry.*



## Maury Display Case

*Rear Admiral Richard D. West, Oceanographer of the Navy (1999-2002), stands by a Maury display case and a "1851 Whale Chart," outside his office at the United States Naval Observatory, Washington D.C. Several of Maury's books, including a copy of the 1853 Sailing Directions are displayed along with NIMA's Sailing Directions and CD-ROM of today.*

His efforts were directly responsible for the United States emerging as a powerful seafaring nation unequalled in its knowledge of the earth's ocean surface. Matthew Maury is known by several titles, all earned as a result of his work in several fields. To the mariner, Matthew Maury is forever known as "Pathfinder of the Seas," a title he earned for his role in developing Wind and Current Charts in 1847, the predecessor of today's NIMA Pilot Chart Atlas. American explorer John Charles Fremont, (1813-1890) was nicknamed "the Pathfinder" in acknowledgment of his expeditions to map the American West between 1838 and 1854. NIMA is proud to have two buildings named after "pathfinders."

And within the world of oceanography he is recognized as the "Father of Oceanography," for his life long work and contributions to safe navigation.

In 1845, Maury cast his eyes skyward and began cataloging the stars due to his belief that the United States should not be dependent upon foreign calculations and celestial observations. By 1849 his astronomical observations were sufficiently complete for him to establish the American Nautical Almanac Office.

Maury is also considered the founder of Naval Meteorology, conceiving the idea of a universal system of meteorological observations on both land and sea.

In 1853, he organized and represented the United States in the first International Maritime Meteorology Conference in Brussels. His 1855 publication, of *"Physical Oceanography of the Sea,"* is considered the first modern textbook of oceanography.

Matthew Maury was an American original who wore many diverse hats throughout his career, some resulting in controversy. Before the Civil War, he served as the first Superintendent of the National Observatory in Washington, D.C. As a native Virginian, he sided with the South at the outbreak of hostilities and served as the Confederate Head of Coastal and Harbor Defenses. At the end of the war, he returned to academic life and served as physics Chairman at the Virginia Military Institute until his death in 1873.

Because of his innumerable contributions in so many diverse and important fields of study, Matthew Maury is today memorialized in many ways. From naval ships to glaciers, the name of Matthew Fontaine Maury remains forever embedded in the American memory, a tribute to his contribution to all sea-faring nations.



## NIMA's Maury Hall

The oil painting graces the building's entrance. In 1989, George Carter Werth and twin brother Lewis Herndon Werth, and another brother Capt. James Maury Werth USN (Ret.) -- all great-grandsons of Matthew F. Maury -- were on hand at the dedication ceremony. The United States Naval Academy has a Maury Hall and there is the Maury-Brooke Hall at the Virginia Military Institute.

### Maury Hall



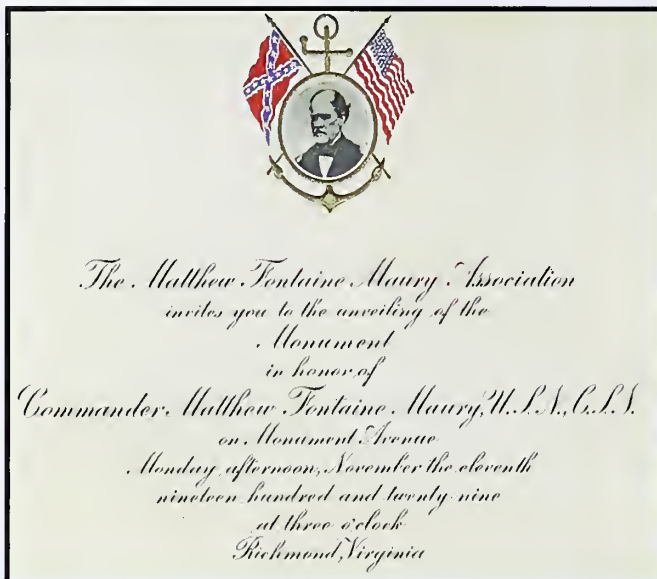
The National Imagery and Mapping Agency's Maury Hall sits beside the Potomac River in Bethesda, Maryland.



## Maury Stadium

Maury Stadium located in Fredericksburg Va., hosts James Madison High School football games and city festivals.



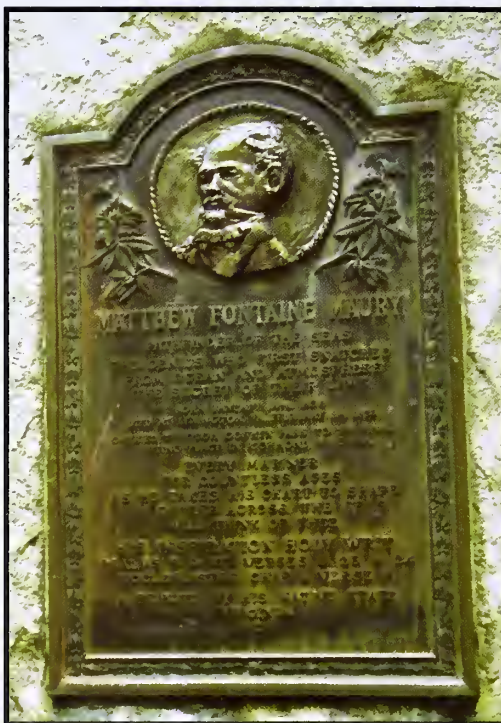


## Invitation

The Monument was unveiled by two of Maury's great-grandchildren in an impressive military and civilian setting on November 11, 1929. Miss Mary Maury Fitzgerald and Master Matthew Fountain Maury Osborne pulled the cords which released the canvas spread over the monument. Note the "U.S.N., C.S.N." after Maury's name recognizing his role in both the United States Navy and the Confederate States Navy.

## Grave

Maury's last words, "All is well" mark his gravestone. His final resting place is in Hollywood Cemetery, Richmond, Virginia. Although he died on February 1, 1873, in Lexington, Virginia, Maury's widow Ann Herndon, wished her husband to be buried in the former Confederate capital. She purchased Mount-26 in the dignitary section, and Maury was interred on September 27, 1873. Called President Circle, behind Maury is the grave of President James Monroe, and to the left (not pictured) is where President John Tyler is buried.



## MATTHEW FONTAINE MAURY

PATHFINDER OF THE SEAS

THE GENIUS WHO FIRST SNATCHED  
FROM THE OCEAN AND ATMOSPHERE

THE SECRET OF THEIR LAWS,

BORN JANUARY 14TH, 1806

DIED AT LEXINGTON, VA, FEBRUARY 18TH, 1873

CARRIED THROUGH GOSHEN PASS TO HIS FINAL  
RESTING PLACE IN RICHMOND, VIRGINIA.

EVERY MARINER

FOR COUNTLESS AGES,

AS HE TAKES HIS CHARTS TO SHAPE

HIS COURSE ACROSS THE SEAS,

WILL THINK OF THEE

HIS INSPIRATION HOLY WRIT

PSALMS 8 & 107, VERSUS 3, 23 & 24

ECCLESIASTES CHAP 1 VERSE 8

A TRIBUTE BY HIS NATIVE STATE

VIRGINIA

1923

## Road Marker

Maury's remains were moved from Lexington and to Richmond seven months after his death. VMI cadets provided the cortege escort along the North River. Goshen Pass, outside Lexington, was a favorite spot of Maury's. Here, his casket was covered with mountain laurel and rhododendron and placed on a train for final burial in Richmond. In 1923, at Goshen Pass, a highway marker was dedicated in his honor. Today, Virginia's Department of Transportation maintains the marker. Virginia named Highway 39, out of Goshen the Maury Highway, and the North River became Maury River.



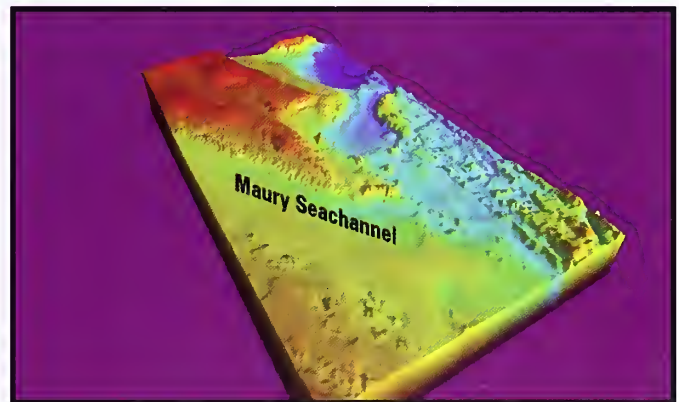


## Matthew Fontaine Maury Monument

The Matthew Fontaine Maury Monument stands at the end of the historic parade of statues on Monument Avenue, in Richmond. The Women's Club of Virginia was the driving force behind the construction of the monument, raising \$60,000 in donations from the State of Virginia, the City of Richmond, and private benefactors. William F. Sievers, a native of Richmond, was the designer. Stylistically, this sculpture is the most complex of all the monuments. Sievers captured an entire range of events and accomplishments in the monument and equated Maury with playing a part in all of them. The statue is composed of images of water, land, and sky, relating to achievements in oceanography, navigation, and meteorology. Since Maury's talents reached far beyond the Civil War, he has been referred to as the "man of peace" amidst the other Confederate war heroes. This was the last of the Confederate monuments to be erected on Monument Avenue.

## Maury High School

Originally the Norfolk High School, in February of 1911, it was re-named the Matthew Fontaine Maury High School. This is a postcard dated 1917. In 1950, Maury's great-grandson, Capt. James Maury Werth graduated from Maury High and went on to serve his country by joining the Navy. His last assignment before retiring from active duty was to serve as the Superintendent of the U.S. Naval Observatory in Washington, thus following in the footsteps of his famous great-grandfather.



## Maury Seachannel 56°33'N, 024°00'W.

The Advisory Committee on Undersea Features approved the name on February 18, 1969. The depth is approximately 3,200 meters. Maury prepared charts of the bottom of the Atlantic Ocean between the United States and Europe, and assisted Cyrus W. Field with laying the first transatlantic cable. The first official message was sent on August 16, 1858. Maury's knowledge made this achievement possible and established him as the locator of the first transatlantic cable. There is also the "Maury Deep" south of the Aleutians Islands located in 51°00'N, 170°00'W.



## Maury I

*Maury (DD-100) was the first warship to honor his memory. The destroyer's keel was laid May 4 1918, by Fore River Shipbuilding Co., Quincy, Mass., and the ship was launched July 4, 1918. She reporting for duty with the Adriatic Detachment on February 18, 1919, and participated in "umpiring" duties for the natural harbors of the Adriatic. On July 17, 1920 she was redesignated DM-5, light minelayer.*



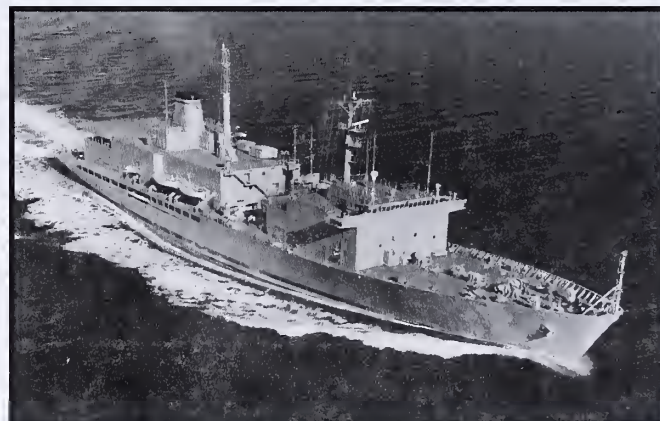
## Maury II

*The second Maury (DD-401) launched on February 14, 1938. Her sponsor was Virginia Lee Maury Werth, granddaughter of Matthew F. Maury. Assigned to the Pacific Fleet after commissioning, Maury operated out of Pearl Harbor when the United States entered World War II. Maury received 16 battle stars for combat service in the Pacific Theater.*



## Maury III

*The third Maury was built under a Maritime Commission contract and launched as Renate (AKA-36), an attack cargo ship. Commissioned on February 28, 1945, she transported Pacific Theater veterans back to the United States. In June 1946 Renate entered Portsmouth Naval Shipyard for conversion to a survey ship and on July 12, 1946 was renamed the USS Maury (AGS-16). On January 6, 1947, she got underway for the Pacific for her first hydrographic mission charting of the waters around Truk and Kwajalein. In 1965, Maury surveyed off the coast of South Vietnam and the Mekong Delta. Her efforts added significantly to knowledge of the characteristics of the coastal area in which naval forces conduct riverine warfare and amphibious operations.*



## Maury IV

*Delivered to the Navy on March 31, 1989, the USNS Maury (T-AGS-39) was placed in service with the Military Sealift Command for surveying operations. Placed out-of-service in September 1994, she was transferred to U.S. Maritime Administration (MARAD) and laid up in the National Defense Reserve Fleet, Suisun Bay, Benicia, CA.*



# NIMA Chart 29002



## **Maury Glacier** 72°42'S, 061°40'W.

The glacier is 4 miles wide, flowing in an ENE direction to the Southwest corner of Violaute Inlet, on the East coast of Palmer Land. It was discovered and photographed from the air in December, 1940 by members of the United States Antarctic Service. Maury was an advocate of Antarctic exploration and the name was applied by the United Kingdom via their Antarctic Place-Names Committee (UKAPC) in 1955, and accepted by the US ACAN (Advisory Committee on Antarctic Names) the same year. Maury Glacier appears on NIMA Chart 29002.



Hat USNS Maury

First Day Cover



### Stained Glass

Located within the National Cathedral, Washington, D.C., Mrs. Alice Parmelee — a granddaughter of Matthew Maury — donated \$50,000 to memorialize her grandfather, her husband James Parmelee, and Myron T. Herrick, a U.S. Ambassador to France. On May 21, 1935, at the dedication ceremony, Captain J.F. Hellweg, the Superintendent of the Naval Observatory in tribute to Maury said, "...that one man has made such a deep and lasting impression upon the world, places him in a preeminent position as one of the world's great pioneers. Very aptly, Lieutenant Maury has been called The Pathfinder of the Seas, a title which he so richly deserved."



## Street Signs



## Richmond, VA

Fontaine Avenue is U.S. 29 (Business) and a continuation of Jefferson Park Avenue, in western Charlottesville, Virginia. Both Fontaine and Maury avenues are named for Matthew Fontaine Maury. Maury was a grandson of the Rev. James Maury, who taught science to a young Thomas Jefferson in eastern Albemarle County.

## Charlottesville, VA

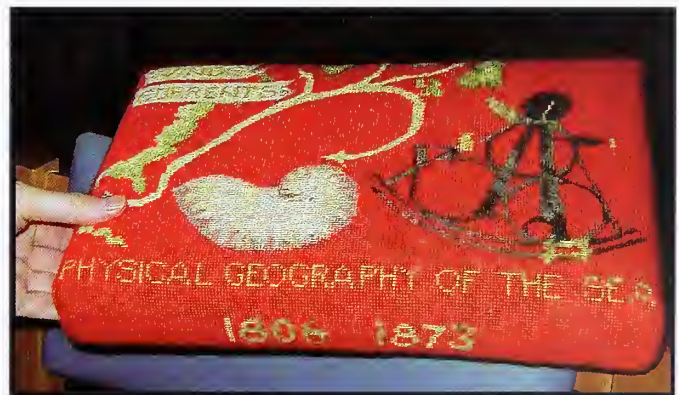


## Lake Maury

Lake Maury is a 167-acre artificial lake that was created in 1932. It's part of the Park that is owned and maintained by The Mariners' Museum, Newport News, Va.

A plaque by the lake reads:

**LAKE MAURY  
NAMED FOR  
MATTHEW FONTAINE MAURY  
1806-1873  
BELOVED VIRGINIAN  
WHOSE CONTRIBUTION TO THE  
SCIENCE OF OCEANOGRAPHY  
LANDED HIM THE TITLE  
"PATHFINDER OF THE SEAS"**



## Kneeling Cushion

This 11 x 14 inch "kneeling cushion" is used for prayer at the Washington National Cathedral. There are 180 cushions dedicated to people who are historically important in shaping the United States. In 1970, Mrs. William Chisholm made the cushion in honor of Matthew F. Maury.



*Note the “L.L.D.” title after Maury’s name as the University of Cambridge honored Maury with a L.L.D. doctorate degree. Although today’s wind rose looks a bit different, the portrayal of information in 5-degree blocks of latitude and longitude has not changed.*

[illegible]*Salted Chemistry, September 1952*

M. F. Maury Comdr. U. S. N.



## Maury-Brooke Hall



Built in 1909, the Maury-Brooke Hall is named for two former VMI professors whose names are notable in American naval history. John Mercer Brooke was a protégé of Maury. As a midshipman, Brooke invented a deep-sea sounding apparatus that could bring up ocean bed samples from 12,000 feet while serving at the US Naval Observatory under Maury. In latter years both were professors of physics at VMI after the Civil War, Maury from 1868 until his death in 1873 and Brooke for more than thirty years, from 1865 to 1899. Today, Maury-Brooke Hall is home to the VMI Regimental Band, *The Bomb* (cadet yearbook), *The VMI Cadet* (cadet news-paper), and the Honor Court. In 1962, The Matthew Fontaine Maury Memorial Fund Scholarship, was established by his granddaughter, Ann H. Maury and is used to assist worthy students.



*A photograph dated 1868 of Professor Maury, L.L.D.,  
Physics Chairman, Virginia Military Institute.*



The strain of the Civil War and years of exile on Matthew Fontaine Maury (seated on left) is clearly evident in this 1868 photography taken in London shortly before his return to the United States. His wife Ann Herndon, is seated to the right, his granddaughter, Nannie, on his lap, and five of his children stand behind him: from left are Eliza, Lucy, Mary, Matthew, Jr., and Diana. Admiral Jansen of the Royal Dutch Navy, a family friend, is standing behind Maury.



# **MATTHEW FONTAINE MAURY SCIENTIST OF THE SEA AND FATHER OF OCEANOGRAPHY**

## **KNIGHTHOODS**

ORDER OF ST. ANN by the CZAR OF RUSSIA: KNIGHT OF THE DANNEBROG DENMARK:  
ORDER OF TOWER AND SWORD, by the KING OF PORTUGAL:  
ORDER OF ST. LEOPOLD by the KING OF THE BELGIANS.

## **GREAT GOLD MEDALS**

MEDAL OF SCIENCE plus KOSMOS MEDAL both by the King of PRUSSIA:

(The KOSMOS was awarded at request of ALEXANDER VON HUMBOLT for whom it had been exclusively struck):  
MEDAL OF SCIENCE By EMPEROR OF FRANCE: OF ARTS AND SCIENCE By EMPEROR of AUSTRIA:  
MEDAL OF SCIENCE By KING OF THE NETHERLANDS: A second one By EMPEROR OF FRANCE:  
ORDER OF THE GOTHES AND THE VANDALS (struck especially for MAURY) By KING OF SWEDEN AND NORWAY:  
GOLD MEDAL OF SARDINIA: AND GOLD MEDAL of the PARIS UNIVERSAL EXPOSITION.  
A COLLECTION OF ALL 13 MEDALS struck during the ROMAN CATHOLIC PONTIFICATE OF PIUS IX.

## **MEMBERSHIPS OF VARIOUS LEARNED SOCIETIES OF THE WORLD AND OTHER HONORS**

IMPERIAL ACADEMY OF SCIENCES, ST. PETERSBURG, RUSSIA: BERLIN ACADEMY:  
LETTERS AND FINE ARTS, BELGIUM: OF SCIENCES of BRUSSELS:  
ROYAL ASTRONOMICAL SOCIETY OF ENGLAND:  
and some FORTY OTHER ONES OF EUROPE, THE ORIENT AND THE UNITED STATES:  
COMMANDER OF LEGION OF HONOR BY EMPEROR OF FRANCE.

## **Honorary Doctorates (1852-1868)**

UNIVERSITY OF CAMBRIDGE, ENGLAND: UNIVERSITY OF NORTH CAROLINA:  
COLUMBIA COLLEGE, WASHINGTON, D.C.

## **HONORS TO MATTHEW FONTAINE MAURY IN THE 20th CENTURY**

A STAINED GLASS WINDOW IN THE NATIONAL CATHEDRAL IN WASHINGTON, D.C.  
Naval Ships named for him; DESTROYERS USS MAURY DD 100, USS MAURY DD 401, and 3 Navy Survey Ships.  
AMERICAN NATIONAL HALL OF FAME, in NEW YORK: MAURY HALL, UNIVERSITY of VIRGINIA;  
MAURY STATUE on MONUMENT AVENUE IN RICHMOND, VA.; MAURY HIGH SCHOOL in NORFOLK, VA.:  
and most importantly, MAURY HALL, 1949, and the 1989 ESTABLISHMENT OF THE MATTHEW FONTAINE MAURY  
FELLOWSHIP ENDOWMENT at the VIRGINIA INSTITUTE OF MARINE SCIENCE AND  
SCHOOL OF MARINE SCIENCE, OF THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA.



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*Know the Earth Show the Way*

